

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (*Previously Presented*): A chemical-mechanical-polishing slurry composition for polishing and ablating an oxide layer selectively in relation to a nitride layer, the chemical-mechanical-polishing slurry composition comprising:

ceria polishing particles;
a dispersing agent; and
an anionic additive,

wherein the anionic additive is added to control a concentration of the anionic additive so that a polishing-rate selection ratio of an oxide layer to a nitride layer is 40 : 1 or greater, and

the ceria polishing particles are polyhedron.

2. (*Previously Presented*): The chemical-mechanical-polishing slurry composition according to Claim 1,

wherein a particle size of the ceria polishing particles is controlled to be within a predetermined range.

3. (*Previously Presented*): The chemical-mechanical-polishing slurry composition according to Claim 1,

wherein the ceria polishing particles are polycrystalline particles.

4. (*Previously Presented*): The chemical-mechanical-polishing slurry composition according to Claim 1,

wherein the anionic additive is water-soluble polyacrylic acid or water-soluble polycarboxylate.

5. (**Previously Presented**): The chemical-mechanical-polishing slurry composition according to Claim 1,

wherein a concentration of the anionic additive is from 0.1 to 0.6 wt% in relation to a whole percentage of the slurry composition.

6. (**Currently Amended**): A method for planarizing a surface of a semiconductor device comprising:

preparing a semiconductor substrate in which a level difference is formed on a surface thereof and a nitride layer is formed at least on an upper level surface of the level difference;

depositing an oxide layer which is for filling the level difference and planarizing the surface of the semiconductor substrate so that a predetermined thickness of the oxide layer can be added to a surface of the nitride layer; and

ablating the oxide layer by a chemical-mechanical-polishing process so as to expose the surface of the nitride layer,

wherein in the chemical-mechanical-polishing process, a chemical-mechanical-polishing slurry composition is used, and

the chemical-mechanical-polishing slurry composition includes ceria polishing particles, a dispersing agent, and an anionic additive, in which the anionic additive is added to control a concentration of the anionic additive so that a polishing-rate selection ratio of an oxide layer to a nitride layer is 40 : 1 or greater, [[and]]

the ceria polishing particles are polyhedron, and
the polishing conditions are controlled such that the zeta potential on the surface of the oxide layer becomes a negative value and the zeta potential on the surface of the nitride layer becomes a positive value.

7. (**Previously Presented**): The method for planarizing a surface of a semiconductor device according to Claim 6,

wherein the level difference is a trench area formed on the surface of the semiconductor substrate.

8. (***Previously Presented***): The method for planarizing a surface of a semiconductor device according to Claim 6,

further comprising ablating the oxide layer by a chemical-mechanical-polishing process in which a silica slurry is used before the surface of the nitride layer is exposed.

9. (***Previously Presented***): The method for planarizing a surface of a semiconductor device according to Claim 6,

wherein the ceria polishing particles are polycrystalline particles.

10. (***Previously Presented***): The method for planarizing a surface of a semiconductor device according to Claim 6,

wherein the anionic additive is water-soluble polyacrylic acid or water-soluble polycarboxylate.

11. (***Previously Presented***): The method for planarizing a surface of a semiconductor device according to Claim 6,

wherein a concentration of the anionic additive is from 0.1 to 0.6 wt% in relation to a whole percentage of the slurry composition.

12. (***Previously Presented***): The method for planarizing a surface of a semiconductor device according to Claim 6,

wherein the oxide layer is a silicon oxide layer, and the nitride layer is a silicon nitride layer.

13. (***Currently Amended***): A method for controlling a selection ratio of a chemical-mechanical-polishing slurry composition for polishing and ablating an oxide layer selectively in relation to a nitride layer, the method comprising:

confirming a selection ratio of an oxide layer to a nitride layer of a chemical-mechanical-polishing slurry composition which includes ceria polishing particles, a

dispersing agent, and an anionic additive, while a concentration of the anionic additive is changed; and

adjusting the concentration of the anionic additive to attain a desired selection ratio of the slurry composition, on the basis of the confirmed polishing-rate selection ratio, thereby controlling the selection ratio of the slurry composition,

wherein the ceria polishing particles are polyhedron, and
in the step of confirming the selection ratio, the confirming conditions are controlled such that the zeta potential on the surface of the oxide layer becomes a negative value and the zeta potential on the surface of the nitride layer becomes a positive value.

14. (*Previously Presented*): The method for controlling a selection ratio of a chemical-mechanical-polishing slurry composition according to Claim 13,

wherein the method further comprises a step of confirming the polishing-rate selection ratio of the oxide layer to the nitride layer, while a particle size of the ceria polishing particles is changed.

15. (*Previously Presented*): The method for controlling a selection ratio of a chemical-mechanical-polishing slurry composition according to Claim 13,

wherein the ceria polishing particles are polycrystalline particles.

16. (*Previously Presented*): The method for controlling a selection ratio of a chemical-mechanical-polishing slurry composition according to Claim 13,

wherein the anionic additive is water-soluble polyacrylic acid or water-soluble polycarboxylate.

17. (*Previously Presented*): The method for controlling a selection ratio of a chemical-mechanical-polishing slurry composition according to Claim 13,

wherein the concentration of the anionic additive is from 0.1 to 0.6 wt% in relation to a whole percentage of the slurry composition.